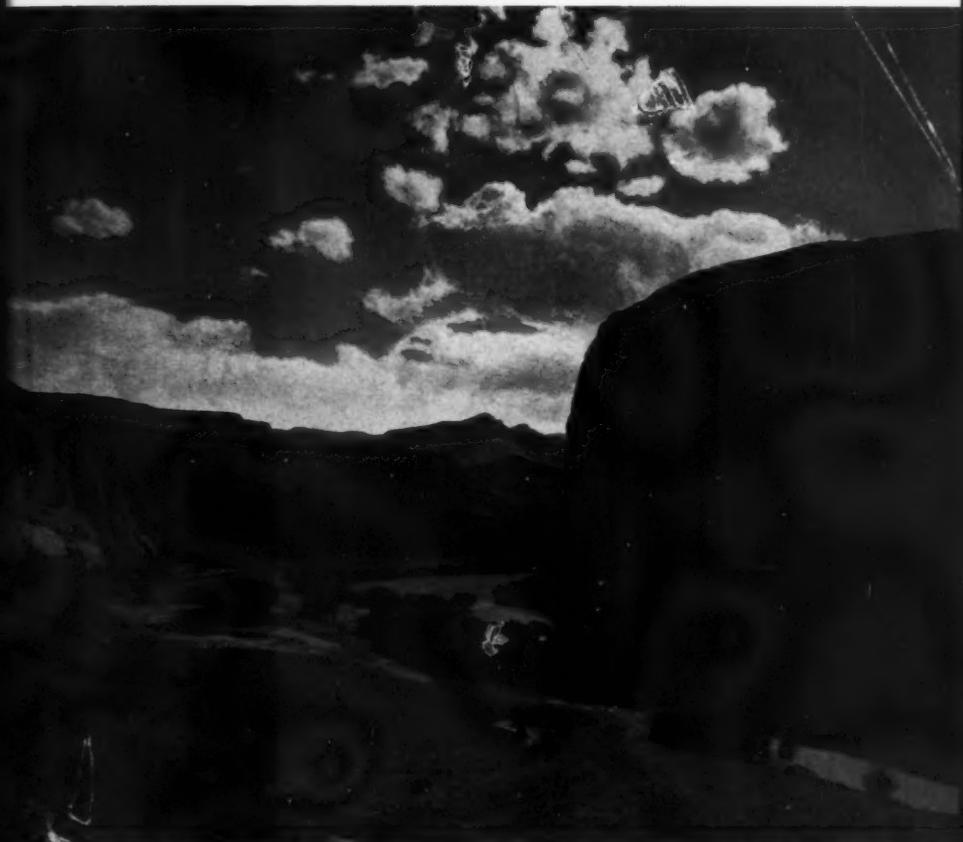


SIERRA CLUB BULLETIN

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ECHO PARK AND STEAMBOAT ROCK, DINOSAUR NATIONAL MONUMENT

Philip Hyde

The Dinosaur Story . . .

Articles by Major General U. S. Grant, 3d, and J. W. Penfold. Photographs by Philip Hyde and Martin Litton

. . . The Chips Go Down

SEE PAGES 9-24

Miscellany

APPRECIATION OF DINOSAUR

We asked photographer Philip Hyde (see pages 9-24) what his feelings were about Dinosaur National Monument after he had traveled with boat, jeep, and camera through the canyons and over the surrounding hillside. There are doubtless a lot of people, we said, who, upon looking over photographs of sagebrush-covered slopes, have difficulty feeling enthusiastic about the place. Here is Hyde's comment:

Their being lukewarm on Dinosaur is more than understandable to me, for there was a problem I found most difficult to overcome on the ground. At least in my case a lot of this difficulty was due to my being accustomed to, not to say enamored of, the lush wetness of the Sierra. This really impressed me when we climbed up to Piute Pass from North Lake after more than two months in the arid desert-like country of Utah and Arizona. Water never made such an impression on me as then. The miracle of thousands of little streams and trickles everywhere had quite an impact on the traveler lately returned from country where water was a treasured rarity. Dinosaur is not a land of forests and meadows and

waterfalls. We need to approach it with a totally different mood in mind. Measured in terms of high country it is unimpressive. But understand it for its desert qualities and it becomes fascinating. I've seen few places where the forces of building and tearing down are better represented. The geological spectacles are tremendously impressive. I have an insight, after Dinosaur, into what those who love the desert find in arid places.

We have watched Ansel Adams working in the mountains and have seen him summon up a cloud needed to complete a composition. Philip Hyde, in his photographic interpretation of Dinosaur National Monument, does not quite exhibit Ansel Adams' power over clouds; but surely he has bent the light to his bidding. We hope that all readers of the *Bulletin* will have the opportunity to see the exhibits of display prints of photographs by Hyde that the Sierra Club plans to have travel the country. Meanwhile we hope that the small reproductions of Hyde's and Martin Litton's fine photographs—the largest reproductions our format and budget can accommodate—will provide a reasonable facsimile of an insight into this spectacularly watered, arid place.

THE SIERRA CLUB,* founded in 1892, has devoted itself to the study and protection of national scenic resources, particularly those of the mountain regions of the Pacific Coast. Since these resources receive best protection from those who know them well, the club has long conducted educational activities, under the committees listed below, to make them known. Participation is invited in the program to enjoy and to preserve wilderness, wildlife, forests, and streams.

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*Reg. U. S. Off.

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Sierra Club Bulletin

VOLUME 37

MAY, 1952

NUMBER 5

...TO EXPLORE, ENJOY, AND PROTECT THE NATURAL MOUNTAIN SCENE...

For the May Record

It Has Happened Here!

On May 22, 1906, the snow on the ground at Donner Summit was 51 inches deep, and on July 24 the same year Mount Rixford and Rae Lake were photographed (see below) by Marion Randall [Parsons]. On May 22 this year the snow at Soda Springs was 67 inches deep. Would anyone care to guess when mules will be able to get across Glen Pass (extreme right) this summer?

(The High Trip Management, our agents report, is dusting off the alternate itinerary announced in the March *Bulletin*. They feel they will have to use this itinerary unless the weather between now and High Trip time is better than it was in late Spring of 1906, which brought three storms. Of these, one in mid-May and one in early June were negligible; but one in late May increased the depth of the pack twenty-five inches.)

That alternate itinerary, if you have forgotten, calls for two weeks south and west of Glen Pass, with camps in Gardiner Basin,

in Center Basin, at Charlotte Lake, at Kearnsage Lakes, and on the spectacular bench above Reflection Lake, overlooking Ouzel Basin and Mount Brewer, and beneath the splendidly sculptured Ericsson Crags, not far from Harrison Pass and Lucy's Foot Pass into the Kern headwaters. The next two weeks would then go north over Glen Pass to Sixty Lakes Basin, Baxter Creek, and Twin Lakes to Sawmill Pass, and the third period from Sawmill Pass to Bishop Pass. All in all, mid-July will find the Kings-Kern Divide as spectacular as it's ever likely to be.

In any event, this would seem to be a good year not to go into the High Sierra without dark glasses and sunburn gooze. Short courses in summer skiing to be announced soon!

Other outing notes: The first Burro Trip has been canceled owing to snow. The Family Burro Trip fee has been refigured; it is down to \$110 (plus \$5 for sign-up).



Mount Rixford
and Rae Lake,
July 20, 1906.

Letters

San Francisco, May 14

EDITOR—Congratulations to the two "Als" (Baxter and Steck) for their initial broadcast over FM radio station KPFA, Berkeley, last Monday evening. One could almost hear the clinking of "hardware" on granite, to say nothing of a yodel or two drifting down from their imaginary aerie!

As chairman and secretary, respectively, of the California Himalayan Committee, future discussions by these two Sierrans on the proposed Himalayan Expedition should prove to be fascinating listening.

L. S. MAWBY

Everglades Nat'l Park, April 29

EDITOR—All we can say is we are sorry we missed the Sierra Winter of '52. What a year we picked to come to Florida! To hear those snow reports from the Sierra and think back to the winters of 1946-47 and 1947-48, the years that my wife and I wintered at Grant Grove, Kings Canyon National Park for one express purpose: to live in snow, to experience those wonderful Sierra snowstorms. Yes, we had snow, a little now and then, up to almost five feet toward the spring of 1948.

But think of the storms which must have come to the Kings Canyon country this year. We haven't heard the whole story, but the snow must have been magnificent.

Mr. Weldon Heald, will you please take a bow.

ROBERT W. HANDLEY

Co. A, 20th Inf., Fort Ord, March 22

SECRETARY—I am writing this short letter to you to accompany a check for six dollars to bring my dues for the coming year up to date. I hope this does not come late. Though I am in the Army I would like you to continue sending my mail to my home address as in the past. I realize that it is possible to go on an inactive status but I wish to continue receiving the excellent publications during my service period which would not come with such status.

At the moment I am undergoing a sixteen-week basic-training cycle here. With the restriction and discipline I often turn to the wonderful memories of the High Sierra and certainly am thankful to be a member of our fine conservation organization.

WILLIAM T. SCOVILLE

American Alpine Club, New York, April 30
EDITOR—It was a great surprise—and a delight

—to receive the copy of the Fifty-Seven-Year Index, Sierra Club Bulletin, 1893-1949. In behalf of the American Alpine Club, I want to send you our thanks for this splendid and most useful donation to our Library; also our congratulations to the compilers for their very fine, comprehensive work.

I hope this Index will be an incentive to other clubs to follow in your footsteps—especially the American Alpine Club! I shall be most happy to call the attention of our Council to this book at its next meeting in May.

HELEN I. BUCK, Librarian

Fresno State College, Fresno, May 16

EDITOR—Thank you for *Going Light*. I shall value it highly. . . . I've read a good many books that were—judging from their titles—supposed to do the sort of thing for camping in general that your little book does for this particular kind of camping. They were all padded out and expanded unmercifully and left one with the question, "How much of this has the author actually done himself—and did it work as well as he promises here?" This little gem of yours doesn't read that way—no padding—just good solid meat and potatoes plus the kind of wit that made me read it through at one sitting. I chortled over it—and underlined the things I wanted to be able to find quickly later.

Did you read Bill Dill's review of it in the Fish and Game Bulletin? If not, you should—his comments (intentional wit I'm sure but not sounding that way) on your chapters on Women, Children, and Burros was worthy of the book.

Incidentally it will be my manual this summer—I've got three burros (not seen by me yet but partly paid for—obvious mark of a greenhorn) with their packing equipment and a trailer tailored to them. God bless you for those diagrams of burro-packing hitches among other things.

CHARLES H. QUIBELL

Richmond, Surrey, England, 5th May
EDITOR—All over the world young men and women are turning in increasing numbers to the hills and mountains for recreation. Many are experiencing the joys of climbing for the first time. Some are deterred, however, by the lack of knowledge, from taking part in this great sport and others who attempt it run into danger through ignorance.

As a result of coöperation between the Train-
(Continued on page 31)



DHAULAGIRI (26,825) FROM THE SOUTH

Arnold Heim

To Dhaulagiri—World's Fifth Highest

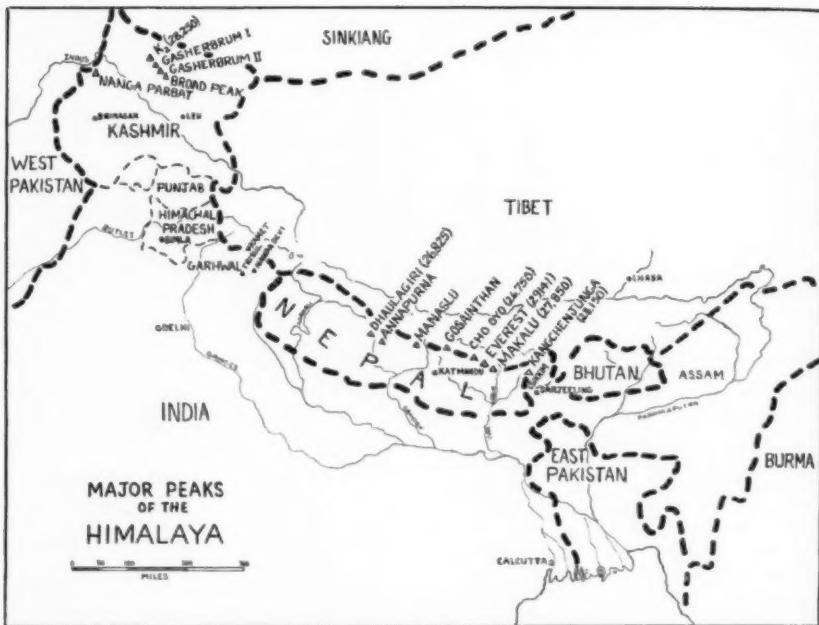
Ten Sierra Club-American Alpine Club mountaineers are completing detailed plans for a California Himalayan Expedition in 1953 to a peak higher than any yet climbed by man

EVERY MAN'S DREAM—if he is a mountaineer—is to climb some day in that most dramatic of all the world's dramatic ranges, the Himalaya. And there are few would-be mountaineers who would not die happier were they but granted the chance just to look upon these greatest of peaks—albeit at a respectful distance.

Ten mountaineering Californians, all members of the Sierra Club and the Sierra Nevada Section of the American Alpine Club, last December began formulating plans to bring the dream to reality—something that few Americans, and no Californians that we know of, have set out to do.

They conceived of an expedition to Dhaulagiri (26,825), the world's fifth highest summit.

Formidable hurdles have already been taken in stride; but they have some very tough ones ahead that will require all the help that can be brought to bear by people who, although they cannot participate directly, are nevertheless fully sympathetic with the Expedition's ends of mountaineering achievement and scientific research. The Expedition's Advisory Committee—none of the members of which will participate in the Expedition in any but an advisory way—is therefore presenting here a summary of the



Major peaks of the Himalaya
(Dhaulagiri just left of center)

plans and a statement of the need, hoping that the nonparticipating many will assist in every possible way the participating few. Further details than those presented here may be obtained from any member of the Advisory Committee or of the Expedition Committee.

The Story Thus Far

In December, 1951, the Expedition had its formal beginnings. The California Himalaya Committee was formed to carry out the preliminary steps for a full-scale expedition to Nepal in 1953. Meetings were held with experienced mountaineers who had passed the traditional high-altitude limit of age thirty-five.

Official endorsement has been given by the Sierra Club Board of Directors and by the American Alpine Club. The State Department is optimistic about obtaining the necessary permission for passage through India and Nepal.

All members of the Himalaya team will complete high-altitude tests of equipment and personnel on two expeditions this summer—one to the Cordillera Blanca in the Peruvian Andes and the other to Mount McKinley, where a new route will be attempted.

The Goal

The California Himalayan Expedition is far more than a sporting adventure. It is expected that significant contributions will be made to science by those expedition members who are experts in zoölogy, physiology, and botany. The high peaks of the Himalaya rank as major goals for man's quest for geographical knowledge and his urge to go where none has been before. Dhaulagiri is higher than any peak yet climbed and a formidable natural adversary.

The Men

The members of the expedition have been carefully selected; each has a fine record of

mountaineering achievement. Members have been chosen not only for individual strength and competence, but also for demonstrated ability to work together in a team. Besides ascending many new and classic routes in the European Alps and on major peaks in the United States, members of the team have organized and led several successful expeditions to Canada, Alaska, and the Peruvian Andes. Ansel Adams, one of America's foremost photographers, plans to accompany the party. His interpretation of some of the most spectacular of mountains is very likely to be one of the expedition's most important contributions.

All expedition personnel are members of the American Alpine Club and the Sierra Club.

The Plan of Attack

In order for climbers to take advantage of the few storm-free weeks before the onset of the monsoon, they must reach India by late March, 1953. This schedule will allow enough time to complete transportation arrangements for the approach to the base of the mountain in northwestern Nepal. From base camp, reconnaissance of the route and

climbing operations will then be carried out in May and early June.

Financing

Cost of the Expedition will inevitably be heavy—so heavy that the financial resources of the climbers themselves will require to be substantially augmented. The Advisory Committee has approved the tentative budget, planned for a ten-man expedition and based on rates prevailing for the last few months and on initial estimates of equipment weight and cost. Changes in some expenses have been anticipated. The most important items are air travel from San Francisco to Calcutta; wages of Sherpas and porters (ranging in number from 10 to 160 in the course of the Expedition's itinerary); food, clothing, and equipment for all; incidental costs of lodging in India, a transport officer, and operating costs in the United States. All items total \$44,933, from which the cost of matériel now on hand or promised would be deducted. It is believed that the budget is a conservative one—that is, that the final total will in all probability be less.

Inquiries have indicated that part of the

THE HIMALAYAN BARRIER BETWEEN NEPAL AND TIBET.

DHAULAGIRI TO THE RIGHT.

Arnold Heim



cost may be met from rights to publication, public performance, and motion pictures and part from donations of matériel. Individual contributions are also being sought.

The Executive Committee of the Sierra Club has agreed to receive and administer funds subscribed by the public and to return them should a change in the international situation or other contingency preclude the expedition's getting under way.

The climbers themselves have generously agreed that, should receipts from rights and subscriptions exceed the expedition costs, the excess would be contributed by them to an Expeditions Fund, to be administered by the Sierra Club.

The Other Mountain

Both committees—Expedition and Advisory—fully realize the mountainous problem

of financing the Expedition. Donations of three kinds are sought—of money, of matériel, and of ideas for amassing both. The committees are mindful of difficulties, failures, and successes in the financing of past expeditions to the great ranges. They plan diligently to avoid the failures. They hope assiduously for the success that can be attained if the many individuals and groups who believe that great things can happen when men and mountains meet will consider the Expedition's plans and achievements their vicarious own—participation, without risk, in one of the greatest of adventures.

Subscriptions

Contributions (deductible) should be payable to Sierra Club and identified "Expedition." Speedy acknowledgment is promised whether they be large or small.

The California Himalaya Committee

ALFRED W. BAXTER, JR., *Chairman*
ALLEN P. STECK, *Secretary*

Ansel Adams
Oscar A. Cook

William Dunmire
Richard Houston

Fletcher Hoyt
Fritz Lippmann

William Siri
Larry Swan

Advisors

David R. Brower Francis P. Farquhar
Lewis F. Clark Richard M. Leonard
Harold E. Crowe Einar Nilsson
Bestor Robinson

DHAULAGIRI FROM THE EAST.

Arnold Heim



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THE YAMPA RIVER IN CASTLE PARK. *Why Drown It?*

Martin Litton

The Meaning of Dinosaur We have heard often of the threat that hangs over Dinosaur National Monument. The time has come for conservationists everywhere diligently to heed this threat, to learn the facts, and to be prepared to speak out should the word be flashed that the danger is immediate. Senator Watkins of Utah has introduced S. 3013, legislation which could clear the way for invasion of Dinosaur National Monument by the Bureau of Reclamation—an invasion against which the Park System has been protected for decades by the Congress.

People who have seen Dinosaur have returned to be ardent advocates of its protection. In these pages we try to suggest some of the things they have seen and to show why protection is not only good aesthetics, but good business too.

The threat is not to Dinosaur alone. Dinosaur becomes but one of the sitting ducks the California Indians used to dispatch so easily. Hiding under a decoy-like helmet, the hunter would wade quietly into a covey of sitting ducks. Then he could pull one bird under without alarming the rest, then another, and another.

The analogy breaks down if we follow it too far—we do not aptly liken national parks and monuments to sitting ducks. But it is easy to identify the hunter and his decoy-like claim of reservoir recreation for all. Reservoirs are fine in their place. There is no need, however, to pawn off one by one our nation's crown jewels of scenery.

Facts on kilowatts, dollars, and acre-feet are seldom easy to read. Nonetheless we must know these facts if we are to defend the national treasury of beauty against the empire builders who believe—or seem to believe—that man lives by bread alone.

Joe Penfold, Western Representative, Izaak Walton League of America, tells of the threat to one of our most spectacular national monuments.

Reclamation's Plan for Invasion

By JOE PENFOLD

THE BUREAU OF RECLAMATION, as part of the initial phase of the Upper Colorado River Storage Project, proposes the construction of a dam at the Echo Park site in Dinosaur National Monument. In a later phase of the same project it proposes to build another dam at Split Mountain, also in the monument. The Department of Interior has the responsibility on behalf of the people, to preserve the monuments and parks of our national park system. Secretary Chapman, in giving his okay to the Bureau to proceed with its plans, has in effect shrugged off that responsibility. The ultimate decision lies with Congress. It alone can authorize reclamation projects.

The question clearly before the people is a simple one. Do we wish to retain our National Park system, or shall we toss it aside whenever a unit of it stands in the way of a federal bureau intrigued by interesting engineering possibilities? Do we wish to retain our National Park system, which we established to preserve some small portion of unspoiled America for all Americans today and for future generations; or shall we toss it aside whenever any part of it interferes with what some local group thinks might be of temporary economic value to them?

Several arguments are emphasized by

those who would build the dams. Let's look at those arguments:

1. They assert that the dams are essential to fulfill the upper Colorado basin states' commitments to deliver an average annual $7\frac{1}{2}$ million acre feet of water to the lower basin states. They also say the dams are essential to the entire upper Colorado project, as the sale of the hydro-electric power generated will pay a major share of the project costs.

It is true that the upper basin states are committed to deliver that $7\frac{1}{2}$ million acre feet. Also, the irrigation and storage features of the upper Colorado project are not economically feasible unless the power users pay the difference in cost. *But:* Bureau of Reclamation reports demonstrate that the substitution of dams at available sites outside the Monument would store 5,085,000 acre feet *more* water, would produce 133,000,000 *more* kilowatt hours annually and would cost \$33,800,000 *less* to construct.

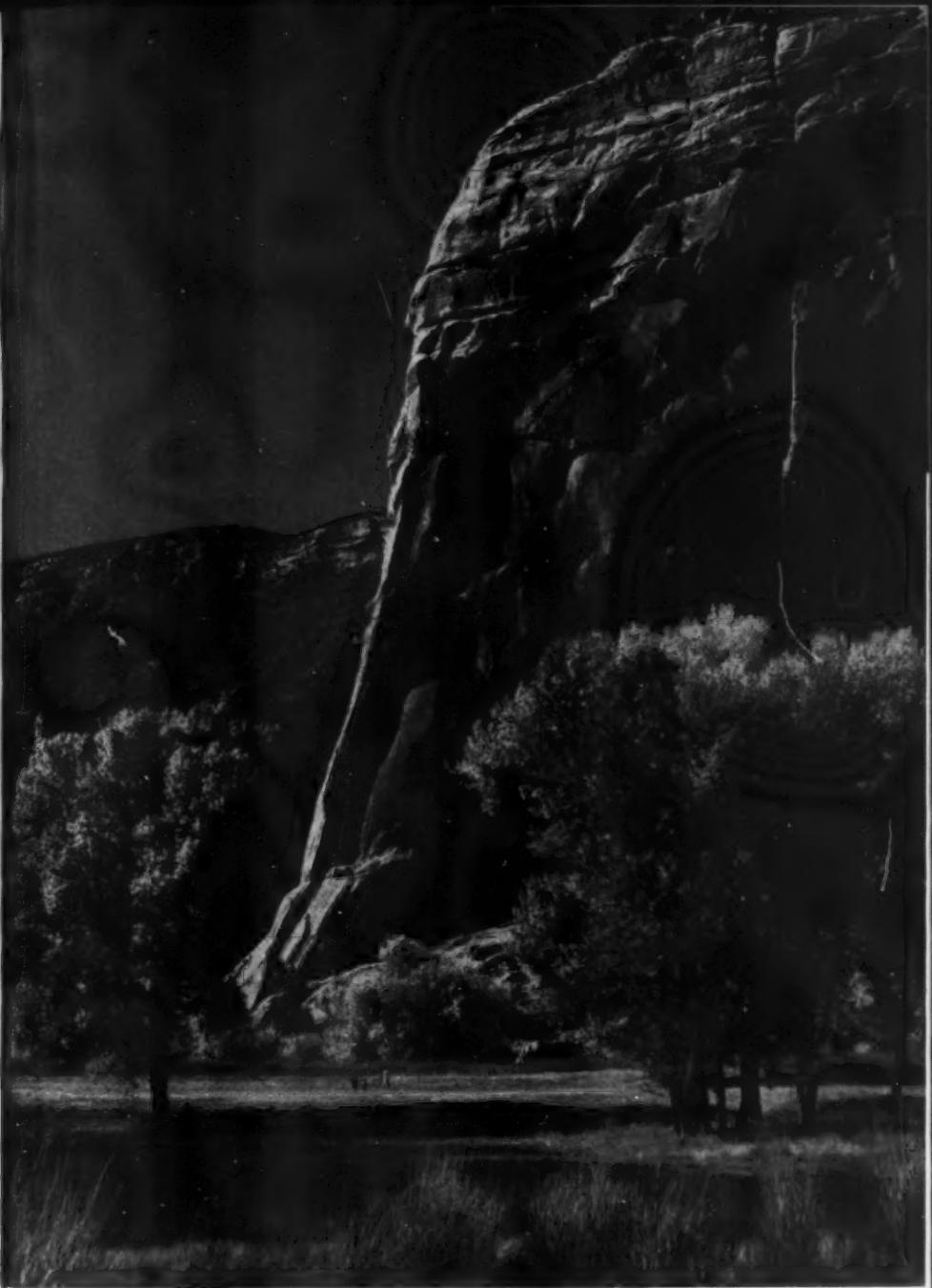
2. They assert that irrigation water badly needed in Utah can only be obtained by constructing the two dams in Dinosaur.

This assertion does not appear to be founded in fact. Bureau of Reclamation plans do not provide for irrigation from either dam, but do provide that Utah's irri-



Rancher Joel Evans and niece in Island Park. Split Mountain Dam would inundate this land.

Martin Litton



Reclamation would needlessly inundate the parklike living space beneath majestic Steamboat Rock—and drown most of the rock's majesty, too.

Martin Litton



In Island Park. On the
trail to Jones Hole.

Philip Hyde

gation needs will be met from the Flaming Gorge reservoir, upstream and outside the Monument. Conservationists have made no objection to the Flaming Gorge dam.

3. The Monument is little visited now, and therefore they aver it has little recreation value. They go on to insist that the new reservoirs would create great new recreation areas with superlative sport fishing.

No doubt about it, the Monument has been little visited in comparison with Yellowstone, Rocky Mountain, Mesa Verde and others. Understandably, too. The National Park Service has not been able to develop the Monument for public use, to provide good access roads nor even minimum sanitary facilities. Nor has the Monument had any build-up publicity-wise. Unfortunately also the name "Dinosaur," given to the original small acreage set aside to preserve an important dinosaur quarry, was applied to the enlarged Monument set aside later to preserve the awe-inspiring canyons of the Green and Yampa rivers. Most folks who have visited the quarry go away believing they have seen the whole thing. They don't even know the spectacular canyons exist.

Every competent critic we've heard comment has stated that Dinosaur National Monument measures up in every way to National Park standards, is unique and worthy in every way of preservation as a national park. Not only that, but it could be opened up for heavy park use at mighty little cost.

Flooding the canyons of the Green and

Yampa would indeed create a big lake behind Echo Park dam. It would extend some 63 miles up the Green and 46 miles up the Yampa. The 500 or so feet of water would inundate and destroy the natural features which make the area of high scenic value. What remained would be just one more second-rate, fluctuating reservoir. Let's not forget, either, that when Reclamation plans have been completed the Colorado River from the Mexican border to Green River, Wyoming, and to Gunnison and Craig, Colorado, will be practically one continuous fluctuating reservoir.

While the dam proponents have done much shouting about the great fishing that would be created in the reservoirs, we know of no adequate studies by competent biologists which support such claims. The dam boosters use Lake Mead as the shining example. *But:* Lake Mead seems to be following the all too familiar cycle of fluctuating reservoirs, has passed its peak and is on the downgrade. Whether its sport fishery will be extinct five years from now or ten is anyone's guess.

4. And now the new assertion, that the defense program requires the power that these Dinosaur dams would generate.

If we need new power for defense industry, by all means let's get it, and the quicker the better. *But:* The Dinosaur dams will cost some \$206,000,000 and will have a combined capacity of 320,000 kilowatts. For sixty-nine million dollars, or *one-third* the cost, we could build three 120,000-kilowatt

At Mantle's Ranch. Most of what access to Dinosaur there is limited to roads best suited to a jeep. Appropriations have been too scant to provide adequate access.

Philip Hyde



steam plants. And we could build them twice or three times as fast, and close to the site of defense industry, avoiding the power losses of long transmission lines. Such a steam plant in the Glenwood Springs-Grand Junction area, using good Colorado coal, might quickly stimulate such potential in-

dustry as the oil shale, itself perhaps to become of great importance in the defense program.

Let's not get stampeded on the defense argument.

It is a simple question and the answer seems simple, too. —*Colorado Sportsman*

Joe Penfold says:

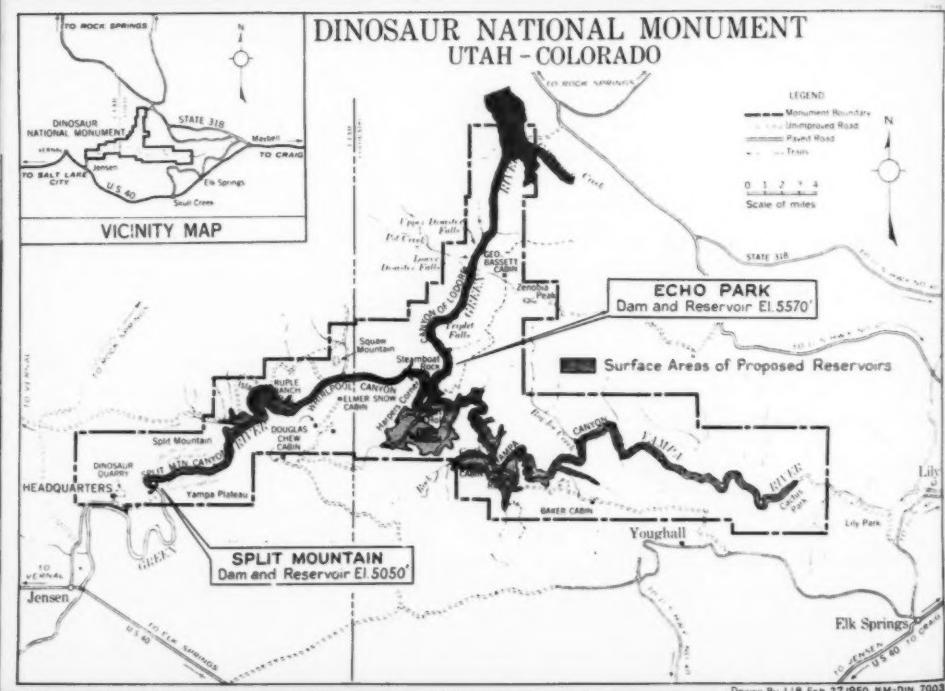
"Our national park system should be preserved. It would appear to be downright silly, if nothing more, to destroy an important unit of it so as to spend more money for less results. It appears that the prime values for which the Dinosaur dams are proposed can all be secured by the use of dam and reservoir sites outside the Monument. The permanent steady business that would result from development of the Monument into a great new National Park should exceed any temporary construction boom. A 'Green and Yampa Canyons National Park' could mean as much to western Colorado, Utah and southwestern Wyoming as Rocky Mountain National Park has meant to the eastern slope of Colorado.

"Let's not let ourselves rationalize away a great natural resource. We owe it to the future to preserve our national park system. When this can be done, and the other values sought can still be obtained through cheaper alternate means, it appears sensible to do so."

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AN EMINENT ENGINEER CONSIDERS DINOSAUR

They Need Water—

But They Don't Need Dinosaur Dams

By U. S. GRANT, 3RD*

GRANDSON of the President of the United States who established Yellowstone National Park, Major General U. S. Grant 3rd was an officer of the U.S. Army's Corps of Engineers for 42 years—"in which," he says in a notable understatement, "I think I had some chances to study reclamation projects and the construction of dams and the utilization of water power." From 1926 to 1933 he was Director of Public Buildings and Parks of the National Capital, and from 1942 to 1949 chairman of the National Capital Park and Planning Commission. He has long been interested in the national parks and in his present position as president of the American Planning and Civic Association played a prominent part in the hearing held on April 3, 1950, by Secretary of the Interior Oscar L. Chapman on the proposed Echo Park and Split Mountain dams which would be built within the Dinosaur National Monument, in northeastern Utah and northwestern Colorado. Secretary Chapman's subsequent decision to favor these projects has shifted the conservationists' defense of the national park system into Congress, and General Grant's special knowledge, abilities, and interest have given him a prominent part in this defense—as readers of the article here presented will readily perceive.—Howard Zahniser

THE TROJAN HORSE in our national park system, model 1952, is now driven by electricity supplied from water impounded behind great dams. It conceals men of greater zeal than understanding, who perform great feats in the name of economic benefits and alleged recreation, but use specious arguments as weapons to breach from within the wall of law protecting the natural wonders of our parks and monuments.

Many of the dams these men would build can be economically justified by their statistics, and often the construction of them may be expected to prove beneficial; but at times the dam builders have a preference for a site that would destroy existing and irreplaceable values that are the heritage of the American people. Through such unreasoned persistence we are confronted now

with a serious threat to our national park system, posed by the Echo Park and Split Mountain projects in Dinosaur National Monument.

The construction of these two dams will destroy the character of a unique national monument having special scenic, geological, archaeological, and recreational values.

If the American people wish to preserve this God-made wonder for the inspiration and enjoyment of their own and future generations, they must act now. Popular support of our national park system is needed to prevent legislation authorizing these and other dams, within the parks.

Such support can be given with the knowledge that damsites exist in other places in the upper Colorado system which will give equivalent or better results at no substantial increase of cost and, probably, as far as conditions are now known, at less cost.

By prohibiting any water power developments in our national parks and monuments, the 1921 and 1935 amendments to the Fed-

*President, American Planning and Civic Association. From *The Living Wilderness* for Autumn 1950; shortened and revised August, 1951 and May, 1952.

(Facing) A different view of Steamboat Rock, above the Green River. Here the projected—and needless—dam would flood one of the most amazing geological exhibits in the country. *Philip Hyde*



SPECTACULAR CANYON WALLS AND PARKLIKE FLOOR—WHERE THE GREEN AND YAMPA MEET

eral Power Act, adopted after full discussion and debate lasting over 15 years, established a well-considered policy of the Government to protect the interests and heritage of all

the people of our country—and the enjoyment of the citizens of other nations who come here to see and appreciate the wonders Nature has given us—against just such



Philip Hyde

attempts as are now being made for the local and temporary benefit of relatively few.

Such an established policy—and I em-

phasize it is to protect not only the rights and interests of our generation, but also the inheritance we should pass on to future generations—such a policy should never be violated just to make easier or a few dollars cheaper the storage of water and the production of power for the benefit of a limited area. When the needed benefits can be obtained at alternative sites, and more economically at these alternative sites, the violation of the national park system should be unthinkable.

The national parks and monuments now developed are already overcrowded, with more than 36,000,000 visitors reported last year. More must be developed for the teeming generations to come. It would be a crime to destroy this unique value which we have inherited, and cut off our heirs with a shilling—a few acre-feet of water and a few kilowatt-hours which, it must be emphasized, can be provided elsewhere.

The preservation of this monument of Nature's grandeur, with its prehistoric record, will in no way disregard the needs of the people in the Colorado watershed and the Bonneville basin, for their needs can be met by reservoirs outside the national monument, without the Echo Park and Split Mountain dams.

The notion that the central Utah requirements are to be provided and can only be met by the Echo Park dam is entirely erroneous; actually, the Bureau of Reclamation's program itself calls for these needs to be met by a diversion from Flaming Gorge Reservoir upstream from and outside the monument.

Equally mistaken is the notion that the 23,000,000 acre-feet of storage, needed to provide the average annual flow of 7,500,000 acre-feet at Lee's Ferry, as required by the interstate compact, cannot be got without this storage in the monument. The fact is that the capacity proposed by the Bureau of Reclamation for the Glen Canyon Reservoir alone is estimated at 26,000,000 acre-feet.

Although the selection of substitutes will have to be made by the Bureau of Reclamation and any outsider must approach the problem with much diffidence, suggested substitutions are, nevertheless, here pro-

RECLAMATION BUREAU PROPOSALS AFFECTING MONUMENT AND SUGGESTED ALTERNATIVES

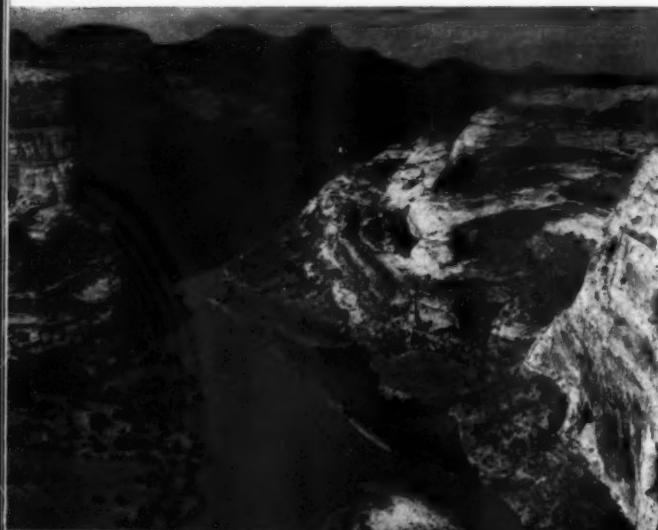
Reservoir project	Gross storage (acre-feet)	Annual firm power (kilowatt-hrs.)	Estimated cost
RECLAMATION BUREAU PROPOSAL			
Built first:			
Echo Park.....	6,400,000	*666,000,000	\$139,400,000
Built later:			
Split Mountain.....	335,000	720,000,000	67,000,000
Gray Canyon.....	2,000,000	1,018,000,000	178,600,000
Cross Mountain.....	5,200,000	335,000,000	49,100,000
Total	13,935,000	2,739,000,000	\$434,100,000
ALTERNATE POSSIBILITY			
Built first:			
Gray Canyon.....	2,000,000	1,018,000,000	\$178,600,000
Cross Mountain.....	5,200,000	335,000,000	49,100,000
Built later:			
Desolation**.....	900,000	433,000,000	33,000,000
Bluff	3,000,000	289,000,000	19,000,000
Dewey	7,920,000	797,000,000	120,572,000
Total	19,020,000	2,872,000,000	\$400,272,000
Increase (saving) from alternates.....	5,085,000		(\$ 33,828,000)

*During the initial stage Echo Park's annual firm power is expected to be 1,200,000,000 kilowatt-hours, but this will reduce to 666,000,000 when the later stage has been reached. The table makes a comparison between completed projects. ** Including some overlapping with Gray Canyon.

posed to show that there is an adequate solution for doing without the Echo Park and Split Mountain Reservoirs, based on information and data contained in the Bureau of Reclamation's own reports.

In brief, what is here suggested is: (1) Construct in the initial stage of the Colorado River project two dams now planned for a later stage—Gray Canyon and Cross

Mountain—and thus omit the Echo Park dam from the initial stage, and (2) plan for a substitution of three dams—Desolation, Bluff, and Dewey—for the Echo Park and Split Mountain combination contemplated for construction in the national monument during the second stage. The tabular comparison above is derived from the Bureau of Reclamation's own data.



Harding Hole, on the
Yampa River.

Philip Hyde

Split Mountain, the mountain the river runs through. Philip Hyde



FIVE RESERVOIRS are now recommended by the Bureau of Reclamation for immediate construction "in the initial stage of the Colorado River storage project." Four of these are the Flaming Gorge, on the Green River above the Dinosaur National Monument, to provide for the diversion of water to Utah; the Curecanti reservoir, on the Gunnison River; the Martinez, on the upper San Juan River; and the Glen Canyon reservoir, on the Colorado River just above Lee's Ferry. The fifth now proposed is the Echo Park reservoir, which would be created by a dam across the Green River just below the junction of the Yampa and the Green, in Dinosaur National Monument. The Echo Park reservoir would flood the canyons of both the Green and the Yampa.

The reclamation results will not be harmfully affected if the Echo Park reservoir is omitted from, and the Gray Canyon and Cross Mountain reservoirs are in its place incorporated in, "the initial stage of the Colorado River storage project." They are now included in the second stage of the project, to which the Echo Park dam could be postponed temporarily.

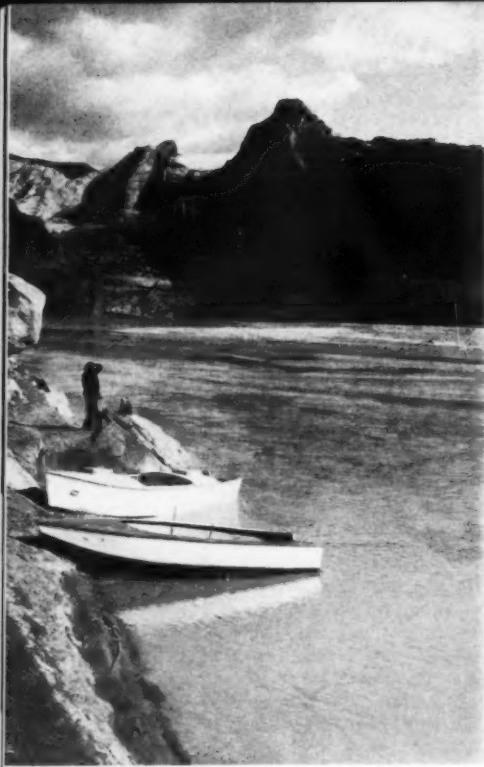
The second phase, or stage, of the Colorado River storage project has also been planned to include a dam in the Dinosaur National Monument. This is the Split Mountain dam, which would create a reservoir in Split Mountain Gorge and Whirlpool Canyon, a reservoir that is to be so used in conjunction with the Echo Park

reservoir as to make the two dams eventually into what might be called a twin project. The two dams are now estimated to cost respectively \$139,400,000 and \$67,000,000—a total for the two together of \$206,400,000.

The data of the Bureau of Reclamation show that for these two dams that would so seriously damage the national park system, there could be substituted in the second stage three alternatives: Bluff, on the San Juan River; Dewey, on the Colorado; and Desolation, on the Green, immediately above the Gray Canyon reservoir (so close, in fact, that the data for these two proposed projects in their present state overlap some).

When probable costs are compared, the ground is less firm, of course, than when we are dealing with storage and power-potential estimates. Such cost estimates as exist were made in different years, which means that they are based on different construction-cost levels. In any case, such estimates are not very reliable until after extended investigations of sites, foundation, character of rock and soil, etc. Nevertheless, such cost estimates as do exist very definitely favor these proposed substitutes rather than the objectionable Echo Park and Split Mountain projects.

Subsequent study of the Upper Colorado River Storage report not only confirms my previous view that the construction of the two dams in Dinosaur National Monument is not necessary and would destroy irre-



The Green River at Pat's Hole—and Bureau of Reclamation boats, party to an invasion.

Martin Litton

additional measures to make up the shortage of the 80,000 acre feet is problematical."

THE PROONENTS of the Dinosaur project place much emphasis on the evaporation factor. Senator Watkins repeats their claim that the substitution of other dam sites for Echo Park and Split Mountain will involve an increase of 350,000 acre-feet annually in the loss by evaporation—if true, this would be a serious loss of water in an area of the country greatly in need of water conservation—and takes issue with the possibility of compensating for this loss.

First of all, this 350,000 acre-feet is just a guess, a nice big round figure to help the sales argument, and apparently not correct even if based on the Bureau's own method of estimating. The latter would indicate an estimated loss by evaporation from the Desolation reservoir of 351,000 acre-feet annually, from which must be deducted the estimated 102,000 acre-feet evaporated from the Echo Park reservoir, so that the difference would be only 249,000 acre-feet—did the Bureau unintentionally overlook making the subtraction? While someone in the Reclamation Bureau doubtless computed this figure quite precisely from the field data available and applied his judgment of the coefficient applicable, and then forgot to subtract the evaporation that would occur from the Echo Park reservoir, the basic information is hardly adequate to give reliable results—that is, in this great area there are not enough stations at which reliable evaporation measurements have been made to justify confidence in computations based upon them, and there are none at or near the proposed dam sites.

Secondly, in translating the observations of pan evaporation into acre-feet for reservoir evaporation the Bureau has used a curve indicating a coefficient of about 105% of the pan records, whereas the Geological Survey has determined that it varies between 70% and 95%, according to local conditions. This indicates that even the 249,-

placeable existing scenic and recreational values—and therefore would be an act of wasteful extravagance—but also that the project as a whole is based on inadequate field surveys and on assumptions of facts still to be determined.

Serious doubt of the economic soundness of the project is justified. If there is, as claimed by some, an urgent immediate need for additional power for the defense program, it is evident that it will take some years to meet this demand and that it can be equally well provided for by some of the dams outside the Monument reservation.

Surely, the Congress will not authorize this so costly project without assuring itself that the necessary factual information has actually been obtained. We cannot forget the Colorado-Big Thompson project, which was originally estimated to cost \$44,000,000 and which appears to have actually cost up to \$200,000,000, and of which Arthur H. Carhart recently wrote: "How much public cash will have to be thrown in to pay for

000 acre-feet loss is too great by some 70,000 or more acre-feet, and the 350,000 acre-feet so harped upon apparently exceeds a justified estimate by about 171,000 acre-feet—an error of nearly 50%.

Finally and most important of all this whole matter of computing reservoir evaporation from pan observations is still what the Secretary of the Interior in his August 6, 1951 newspaper release justly spoke of as "a comparatively little known but important phase of water resources development" and called "an old hydrologic mystery . . .

One difficulty originates from the fact that no one knows just how much moisture the atmosphere demands from a given expanse of water under different climatic conditions." In the same release, announcing the establishment on Lake Hefner near Oklahoma City of a research project for a better solution of this mystery, the Secretary of the Interior goes on to say that "the Bureau of Reclamation's engineers *must know* exactly what losses by evaporation are likely to occur before they take a dam past the investigation stage."—And yet the proponents of this project without such exact knowledge propose to railroad through this tremendously costly project and destroy a most unique national monument, and they have the effrontery to quote a guessed-at and manifestly exaggerated 350,000 acre-feet loss by evaporation as an argument against even considering substitute damsites to save the national monument!

Another fallacious argument advanced by the proponents is the erroneous claim for the creation of added recreational facilities

by the dams in the Dinosaur National Monument. This is just not true: As it is proposed to substitute other reservoirs of greater extent with more accessible shores for the two in the monument, there will be on the substitutes even *greater opportunities for the kind of public recreation they afford*; whereas the sites the Bureau recommends for the two reservoirs, for which these substitutes are proposed, now have *special and rare recreation opportunities* that would be destroyed. Especially noteworthy is the proposed flooding out of Island Park, Rainbow Park and Little Park. This loss of recreation facilities is so obvious that the spurious assertion that added or better recreation facilities would be created by the dams in the Dinosaur National Monument can only be considered an intentional effort to build up the argument for them without regard to the facts.

There are, of course, other alternatives than those here considered—and other combinations of alternatives. The important fact to emphasize is that it is not necessary to invade the national park system in order to realize the objectives of the Upper Colorado River storage project. Even if alternatives would cost much more than reservoirs within Dinosaur National Monument, the alternatives should be chosen rather than destroy the unique irreplaceable wilderness resources of the monument. When actually, it is seen that such alternatives can be constructed at less cost, and considering the added storage and power gained, there should be no tolerance of Reclamation's failure to proceed with plans for these alternatives.



In Echo Park. Part of the heart-land of Dinosaur National Monument—the part Reclamation would cut out. *Martin Litton*

One interesting, heretofore recondite, element of the problem is the possibility that the alkali content in water returned from irrigation and the wastes from the growing phosphate industry in the Green River basin above the Flaming Gorge Reservoir may in time so vitiate the water in this reservoir as to make it less suitable for efficient irrigation use in the Uintah Basin. The State of Utah, therefore, with wise foresight obtained a reservation in the Interstate Compact for its use of 5,000,000 acre feet per decade of the potentially superior waters of the Yampa River flowing past Mabell, Colorado. Some proponents of the Echo Park reservoir now bring forward, as one of the arguments for this latter reservoir, that it is needed for these reserved waters of the Yampa to be used in it to dilute the contaminated waters coming from the Flaming Gorge reservoir and divert the diluted water from Echo Park to the Uintah Basin for irrigation.

It should be noted that: (1) this is only a conditional plan the need for which will arise only if and when, years in the future, the Flaming Gorge water becomes unfit for irrigation use; (2) it gives no assurance of being a final solution in case the dilution

should ultimately itself prove inadequate; (3) an alternative solution would be the establishment of control over the extent of contamination of the Green River water; and (4) another solution would be a dam outside the national monument when the time comes. This possible future problem is certainly no argument for building the Echo Park Dam now, in the first phase of the project. It is noteworthy that this proposed illegitimate use of the Dinosaur National Monument was not evident from the compact itself, and that, if it had been candidly stated to the National Park Service at the time, the latter would have had a chance then to raise the question and to condition its approval of the compact on the insertion of limiting language.

THE FOREGOING is limited to consideration of the engineering features of the project as proposed by the Bureau of Reclamation. Consideration of the financial features justifies serious doubt as to its economic soundness. Outstanding authorities have questioned there being the market for the power to be produced and justification for the credit taken for irrigation. Certainly the field work done to date, elsewhere than on the Echo Park site, is not sufficient on which to base reliable estimates of cost. Space is lacking to go into these features here, but the view that the project is economically unsound should be assumed until it is given more thorough study and further reliable facts are developed to support the seemingly exaggerated or ill founded assumptions made by the Bureau.

The hard fact is that the Bureau of Reclamation—despite the laws safeguarding the national park system from such dams—has already made site surveys within the national monument and has done other preparatory work (including propaganda) to such an extent that it does not want to make similar studies of alternative sites.

Conservationists throughout the country can here defend to the full their national park system, confident that preservation of

Unusual cliff sculpture in Hell's Canyon.
Philip Hyde



In Upper Whirlpool Canyon. After Reclamation, the deluge.

Philip Hyde

the Dinosaur Monument entails no sacrifice of other benefits.

There is no thought on the part of any conservation interest to deprive the citizens of the upper Colorado River basin of any drop of water which they need or can put to use in bettering their communities. On the contrary, it is the Bureau of Reclamation which has deprived and continues to deprive the people dependent on the waters of the Colorado River system of some 200,000 to 300,000 acre-feet annually by its \$200,000,000 diversion through the Colorado-Big Thompson project.

Objection is made, however, to the unnecessary destruction—at incalculable expense to the already heavily burdened nation—of one of our great natural, scenic wonders, which has been legally reserved for the benefit of the American people and has such unique inspirational and recreational values. What we object to is not a



sound project for the upper Colorado basin, but the sale of our birthright for a mess of pottage—and making us pay for it.

Dinosaur Summary

1. *The Echo Park and Split Mountain dams are not necessary for the successful and economical development of the Upper Colorado Basin, or for compliance with the Interstate Compact, or to furnish the proposed diversion to the Utah Basin. The claim that these dams are so necessary is definitely in error.*

2. *In fact, substitutes are shown according to the reports of the Bureau of Reclamation, which will not only furnish more water storage and more hydroelectric power, but will cost less for the results attained.*

3. *The Dinosaur National Monument contains natural, geological, archaeological, and recreational features that are unique and irreplaceable. These are treasures which our generation holds in trust for posterity. There is a moral obligation upon us to preserve them undamaged for our grandchildren, our great-grandchildren, and for their children.*

4. *Such recreational features as could be developed in connection with the reservoirs would be equally provided on the substitutes, and would be*

Dinosaur Summary, Concluded

just what is found at every one of the thousands that already exist throughout the country; the unique educational and inspirational values would be destroyed—and quite unnecessarily—if the dams were built in the Monument.

5. Our growing population needs more national parks and national monuments and more places of special interest displaying the variety of natural manifestations. Every visitor to such a park is a better citizen afterwards, and we need good citizens. Any reduction in the extent or character of our parks would be a step contrary to the public interests.

6. If these dams are allowed to be built they will constitute precedents for again repeatedly violating in the future a wise policy, established by Congress with the Department of the Interior, to prevent just such wanton destruction of irreplaceable values.

7. The injury will be to the whole country and to future generations not here to defend their heritage; the benefits to a relatively small number of local inhabitants and their communities who, through a misunderstanding, do not realize that the benefits can be had just as cheaply or more cheaply without these two dams and reservoirs.

There are really no valid reasons for dams within the Monument, but there is always a temptation to grab park lands for any other purpose. Public opinion has been stirred up under a misunderstanding, and it is human nature not to want to give up a cause which has once been espoused.

UNBELIEVABLE STEAMBOAT ROCK. Shall it be the nearly submerged tombstone for austere beautiful Dinosaur National Monument? *It need not be.*

Philip Hyde



Winter Sports—A Good Season

The past year's activities and accomplishments relative to the scope of the Winter Sports Committee have been carried out primarily by the various subcommittees. For the most part, the results have been excellent. Credit for this goes to the subcommittee chairman and their members.

Winter Touring.—This program was laid out and directed by Alan Stiles in a most extensive and energetic manner. A complete schedule was prearranged, leaders chosen, and publicity given both prior to and after each trip. Except for the cancellations made necessary by the abnormally severe storms, the entire program was carried out as scheduled.

Terrain Survey.—Under the continued guidance of Richard Felter, indexing of the future ski areas both favorable and adverse was continued. Recent studies have produced no spectacular developments. This committee is watching for the possible opening of present roads for winter use, and the consequences thereof.

Tests.—By the addition of several new test judges early in this ski season, Keith Lumm's was able with his subcommittee to expand the test program in the upper brackets. Week ends on which test judges were to be available were carried in the schedule. A considerable number of second- and third-class tests were passed.

Medical.—Dr. Joseph A. Guthrie took over providing medical assistance at Clair Tappaan Lodge and organizing first aid.

Avalanche.—Under the direction of Jack Major, this committee has kept a scrapbook on avalanches with a purpose of cataloguing avalanche areas and avalanche conditions for future study.

Far West Ski Association.—During the past season, the chairman of the Winter Sports Committee attended all meetings of District 5, Bay Area, of the F.W.S.A. The present vice-president of this district at the April 26 convention in Squaw Valley presented a change to the F.W.S.A. by-laws, eliminating the compulsory 100 per cent membership, and changing representation to a proportional basis. This motion was defeated; however, there was considerable support, and it is possible that before the next year's convention in San Francisco, a solution to this problem can be found.

Proposed Rolf Pundt Hut Site.—Several scouting trips into the area just north of Barker Pass have been made during the last year by way of investigating the report made last year by Alan Stiles on site and construction. Study of this and other possible locations has continued. Before definite recommendations can be made to the Board of Directors, the problems of exact location, construction, and finances must be solved.

Ski Patrol.—Ned Robinson ably conducted the activities of the Ski Patrol at Norden. The patrol made an excellent record in service to skiers at Signal Hill as well as at other ski areas throughout the season.

JOHN A. LINFORD, Chairman

Membership Report, April 30, 1952

	April 1951	October 31, 1951	April 1952
Atlantic	109	128	134
Loma Prieta	473	472	519
(Los Padres)	80
Mother Lode	250	252	266
Riverside	93	98	100
San Diego	111	130	136
San Francisco Bay	3,762	3,604	3,697
Southern California	1,929	1,913	1,926
General Membership	351	399	434
	7,078	6,996	7,292

Highlights from *Outdoors Unlimited*

Of interest to the Sierra Club are the following notes on the April issue of the publication of the Outdoor Writers Association of America:

Among new members of the Outdoor Writers are Albert L. Gustus, conservation chairman of the Southern California Chapter, Sierra Club; Grant Matthews, new fish and game columnist of the San Francisco *Chronicle*; and Frederic M. Rea, travel editor for *Sunset Magazine* [and Frederic R. Gunsky, SCB Editorial Board member.—Ed.].

Larry Cook of the League of Ohio Sportsmen is quoted on a current Ohio project called "Adopt a Stream." This is billed as a new way to farmer-sportsman relations, a solution to better game and fish crops through better habitat, and a realistic approach to better soil use. It involves cooperation of sportsmen's clubs with Soil Conservation Districts in planting of protective covering for game, development of stream banks, and the like. The clubs would provide game food and cover as well as their services in making the plantings, in return for farmers' including such plantings and areas in their soil conservation projects. This may seem to be far-fetched in its connection with the Sierra Club's aims, but the principle might conceivably be applied in improving conservationists' relations with various private interests. At some time in the not too distant future, may we not have to coöperate with landowners in establishing access trails to hiking country, or buffer zones around parks and wilderness?

Arithmetic is used to advantage by Joe Penfold of the Izaak Walton League in a pair of letters to one George G. Everett, a Colorado stockman who filed a damage claim against the Fish and Game Commission because some antelope forced out of South Park by snow had grazed on his property. The claim covers a period of 10 days, and values forage consumed or destroyed by 200 antelope at \$520. Additional claims of damage make a total of \$820. Penfold con-

verts this into 2,000 antelope-days, at 41 cents per antelope-day, or \$12.30 per antelope-month. Five antelope equal one cow, according to accepted rates, says Penfold, thus the stockman's figure is equivalent to \$61.50 per cow-month. But—here's the sticker—Mr. Everett grazes cattle on the national forest at a lease rate of 73 cents per cow-month, and on Taylor Grazing lands at 12 cents. Either his own land is producing some gold-plated variety of grass, says Penfold, or the stockman is paying the public which owns the national forests altogether too low a price for the grass his cattle eat or destroy and for the damage they do to watersheds.

In a second letter, Penfold totals the fees paid in a year for use of 80,000 acres of public land, state and federal, by Mr. Everett. Total cost to the stockman is about \$1,241 in leases and grazing fees.

Ken McLeod of Klamath Falls writes of the campaign against the Reclamation Bureau's plan to create a 1,800,000-acre-foot water storage reservoir near Weaverville on the Trinity River. One million acre-feet of water annually would be diverted from the Trinity to the Sacramento through some 37 miles of tunnels connecting a series of hydro-electric plants of 218,000-kilowatt capacity. McLeod is especially vehement about the Fish and Wildlife Service's unqualified approval of the scheme, which he claims fails to protect the fishery resource. The diversion plan would destroy half the present spawning area for salmon and steelhead in the Trinity, which supplies 60 per cent of these fish to the Klamath.

Arthur Carhart joins an OWAA chorus on the refrain that the vital fight to preserve natural resources and recreation areas is carried on at the local level. "The draining of a pond or marsh, the burning of fence rows in Center Township just down the road, the clear-cutting of some woodlot that has protected headwaters of some stream that had been running clear—all of these are as important in their way as the big Army

dams in the Dakotas. . . . One of the difficulties in the battles we all may wage against ill-conceived misuse of natural wealth is each battlefield is in considerable degree a localized business. But put them all together and the aggregate is the whole struggle . . .

"There is one fundamental, I believe, in any scrap. . . . There must be some element of fundamental policy inherent in the con-

flict. The clique of western stockmen, now moving to invest themselves with vendable rights in 400 million acres of publicly owned lands, certainly involves fundamentals. . . . The issue of Reclamation moving in to make scenic canyons of the Dinosaur National Monument into reservoirs involves fundamental policy; the breaking-down of the principles underlying the whole national park system . . ."

FRED GUNSKY

Roster of High Sierra Packers

We are pleased to publish below, for the benefit of members who wish to plan their own summer packtrips, a list of the East Side and West Side members of the High Sierra Packers' Association. The best way to find out where each of the stations is situated is to have at hand the map from Starr's *Guide to the John Muir Trail*.

EAST-SIDE PACKERS

Pascoe's Pack Station, Road's End, Earl V. Pascoe and Son.
Olivas Pack Train, Olancha, Henry Olivas.
Jordan Hot Springs Pack Station, Olancha.
Cottonwood Pack Station, Cartago, Leo Rogers.
Mt. Whitney Pack Trains, Lone Pine, Bruce Morgan.
Glacier Pack Train, Big Pine.
High Sierra Pack Trains, Independence, Archie C. Dean.
Parker's Pack Train, Independence.
Hall's Pack Trains, Independence.
Rainbow Pack Outfit, Bishop, Dudley Boothe and Orville Houghton.
Mammoth Lakes Pack Outfit, Mammoth Lakes, Lee Summers.
Rock Creek Pack Station, Bishop, Herbert London.
Hilton Lakes Camp and Pack Station, Bishop.
McGee Creek Pack Station, Bishop, Russ and Anne Johnson.
Coleville Pack Station, Coleville, Mono County, Bob Tracy.
Little Antelope Pack Station, Coleville, Mono County, H. D. Winkle.
Agnew Meadow Pack Train, Mammoth Lakes.
Schober Pack Train, Bishop.
Fontier Pack Train, June Lake, Elmer C. Jensen.
Jay Pearce, Bridgeport, Mono County.
Bogard's Camp, Bridgeport, Mono County, Jack and Lucile Bogard.

Claude Hunewill, Bridgeport, Mono County.
Leavitt Meadows Pack Train, Bridgeport, Mono County, Allie W. Robinson.
McKays Pack Station, Coleville, Mono County, Marvin McKay.
Red's Meadows Pack Train, Mammoth Lakes, Arch Mahan.

WEST-SIDE PACKERS

Sleepy 2F Pack Train, Dinkey Creek, Arnold Bowline, 9 Sparks St., Bakersfield.
MK Pack Trains and Resort, Mineral King, Ray Buckman, Three Rivers, Calif.
Diamond X Pack Train, Dinkey Creek, Walter Bunn and Cecil Phipps, 4310 Ventura Ave., Fresno.
High Sierra Packer, Dinkey Creek, Rae Crabtree, Star Route, Clovis.
High Sierra Pack Station, Mono Hot Springs, J. E. and T. H. Cunningham, Northfork.
Bar Seven Pack Train, Cedar Grove, Kings Canyon National Park, Sam Davis, Dunlap, Calif.
F. E. Pike Pack Station, Box 118, Lakeshore, F. E. Pike, Box 82, Raisin City.
Balch Park Pack Station, Springville via Mt. Home, Roy C. Negis.
Aspen Meadow Pack Station, Springville, California, Vernie T. Pace.
Sierra Pack Camp, Bass Lake, Milt H. Parker, Coarsegold, Calif.
Rutherford Pack Station, Springville, Calif., Owen Rutherford, 1562 22nd St., Porterville, Calif.
Horse Corral (Cecil Pack Train), Kings Canyon National Park, Alan Savage, Jr., Route 2, Box 162, Exeter, Calif.
Fred Wass Pack Outfit, Fish Camp, Fred Wass, Mariposa.

A special subcommittee of the Outing Committee will endeavor to help members plan their individual outings.

Amendments Passed

The following were elected to the Board of Directors on April 12: Ansel Adams, Phil S. Bernays, Harold C. Bradley, David R. Brower, Lewis F. Clark, Harold E. Crowe, Marjory B. Farquhar, Alex Hildebrand, Arthur B. Johnson, Oliver Kehrlein, H. Stewart Kimball, Richard M. Leonard, Charlotte E. Mauk, Einar Nilsson, Bestor Robinson.

All By-Law amendments passed; the vote was as follows:

For the increase in dues to \$7.00 as of April

1, 1953, 2395 for, 551 against.

For the decrease in admission fee to \$5.00 as of April 1, 1953, 2363 for, 543 against.

For the \$25.00 Contributing Membership classification, effective April 1, 1953, 2743 for, 148 against.

Several members have paid the increased rate one year too early. The extra dollar is being credited to the Conservation and Memorial Fund—a good cause and deductible—unless objection is raised. To those who raise no objection, the thanks of the Finance Committee!

Russell Gets Guggenheim

Dr. Carl P. Russell, Superintendent of Yosemite National Park, is included among the Californians who will benefit through grants-in-aid awarded by the Simon Guggenheim Memorial Foundation for 1952-53. Russell will interrupt his official National Park Service work in order that he may devote a full year to the writing of fur-trade history.

Dr. Russell studied fur-trade history as a part-time undertaking for the past 20 years. The period with which he is especially interested is 1804 through 1843—from the time of the Lewis and Clark Expedition until the great emigration of home-seekers first pushed into California and the old Oregon country. The area covered by his studies is all of that great territory west of the Mississippi River, but especially the lands drained by the upper reaches of the Missouri, the Columbia and the Colorado Rivers. The subjects within the fur-trade story upon which Russell directed special attention are the

trade goods and the equipment which were carried into the West by the founders of merchandising in the American Wilderness.

It is planned that four volumes shall present the materials which Russell has assembled; firearms of the fur brigades, paraphernalia of the trappers and traders (including equipment and the multifarious trade objects), processes and procedure in gathering the crop of beaver pelts upon which the early western economy was based, and the people (including some of the Indians) and places involved in the picturesque trafficking.

Many National Park Service areas are related to the fur-trade history. Even Yosemite National Park enters the fur-trade picture. Joseph Reddeford Walker led a band of American trappers across the Sierra in 1833—the first white men to view the spectacular beauty of Yosemite Valley.

The books are to be illustrated by some 300 pen-and-ink drawings which are now in readiness.

Plus or Minus?

What values do we have for weighing creation against destruction? We build a dam and lose a valley. We gain power for industry and lose the productive soil. We make a lake to sail small boats and lose a trout-stream. What an awe-inspiring problem it is to measure the worth of what we get and the value of what we lose!

—Nature Conservation News, March, 1952.

The Nature Conservancy, from whose publication the foregoing quotation is taken, is an independent member-governed organization dedicated to saving America's heritage of wild nature. Its specific object is to preserve natural areas as living museums of the primeval wilderness. Such tracts are precious for their scientific, educational, and aesthetic values. They also afford a home for the multitude of kinds of living things that would otherwise vanish from the earth, destroyed by our civilization.

The work of the organization began in 1917 under the direction of a committee of the Ecological Society of America. In 1946 the Ecologists Union was formed to take

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over these tasks. In 1950 its name was changed to The Nature Conservancy. Membership is open to individuals and organizations.

The address is the same as for the Wilderness Society and the National Parks Association, 1840 Mintwood Place, N.W., Washington 9, D.C.

Threats to Parks Increasing

The invasion, current or potential, of our national parks, wild or wilderness areas, and wildlife refuges by the dam building programs of the Bureau of Reclamation and the Army Corps of Engineers is a good deal more extensive than the wealth of publicity attendant on a few currently dramatic cases would indicate.

Here is a quick survey of the projects which would affect such areas:

National parks—9 projects (5 Reclamation, 4 Engineer Corps)

National wildlife refuges, game refuges, or wildlife management areas—31 (Reclamation)

Wilderness areas and wild areas of national forests—21 (Reclamation)

This makes a grand total of sixty-one such areas affected by projects currently in operation or proposed. In some cases several projects affect one area, but we have given here only one credit to each refuge, wilderness area or park potentially affected, regardless of the number of projects involved.

—*Outdoor America*

DANGER, AD MEN AT WORK

You're sure she smokes du Mauriers! Sun valley . . . Mont Tremblant . . . St. Moritz . . . wherever the skiing's best, you'll find her . . . a snow-flecked goddess . . . "Christies" . . . "Slaloms" . . . "Tight-reverses" . . . she takes them all in her stride.—Adv. in *New Yorker*. Now let the goddess try her stride on "Down-hills" . . . "Cross Countries" . . . and "Jumpings" . . . Us, we'll just light a pipe.

. . . AND AD ARTISTS

Ads for the recent novel by R. Frison-Roche, *First on the Rope* (Prentice-Hall), show two hands on a rope which is obviously held from above. Now it's our turn to ask how the rope got up there in the first place.

Doty to FPC

The nomination of Dale Doty as a member of the Federal Power Commission was confirmed by the Senate May 9, 1952. Prior to that time Doty was Assistant Secretary of the Interior.

Members will recall him as principal speaker at the Sierra Club Annual Dinner in Los Angeles last November, where many were impressed with the earnestness and sincerity of his approach to conservation problems. Excerpts from his remarks at the dinner were published in the December 1951 *SCB* (pages 10-14); these contain an exemplary statement of objectives for the National Park Service. In his new position Doty will frequently have occasion to take part in discussions and decisions on matters affecting conservation interests.

Joel D. Wolfsohn, formerly Assistant to the Secretary, has been appointed in his place.

WHY DIDN'T WE SAY THAT DEPT.

Kingdom of Adventure: Everest. By James Ramsey Ullman.

The task was there to be done. Ten years after the last attempt on Everest, no successor to Younghusband had brought the story compactly up to date, and this no doubt made Mr. Ullman inevitable . . .

Unfortunately, the merits of the original writings are throughout marred by the additions of James Ramsey Ullman, the 'interlocutor,' named in full every time he interlocutes (if that is the word), a thing he does far too frequently and with disastrous results in accuracy, taste and judgment.

"Two men crept slowly and painfully upward along a desolate skyline ridge. Below and on three sides of them were the blue depths of space." Why three, why blue? Why the whole purple paragraph and many like it? . . .

. . . Mr. Ullman can so misread the Everest lessons that he says that 'the sheerly mechanical climbing problems are so small as to be almost negligible.'

. . . one reader found this one hard to lay down until he had begun it.

T. A. BROCKLEBANK, in
The Alpine Annual, 1950

Courses at Idyllwild

New to the program of the Idyllwild School of Music and the Arts next summer will be a four-weeks course for teachers, both elementary and secondary, in Conservation of Natural Resources, two one-week workshops in Conservation, and a four-weeks course in Plant Identification. These have been added because of the many requests for such courses, and because Idyllwild is a natural outdoor laboratory for them.

The Idyllwild School campus is located in the pine forest on the slopes of Mount San Jacinto at an elevation of 5000 feet. It is adjacent to the magnificent 12,000-acre wilderness area of the Mount San Jacinto State Park, which includes the rugged peaks of the 10,805-foot mountain. Near the school also is a delightful resort area with both state and county parks, providing camping sites for students who wish to camp out.

Clinton Schonberger, instructor in biological science at San Bernardino Valley College, will offer the four-weeks courses which will carry two upper level or graduate units each through the University of Southern California. He will be assisted by a resource faculty provided by the State Department of Education and the State Department of Natural Resources, which is co-sponsoring the courses. A number of interesting field trips will be included, and Ernest Maxwell, chairman of the Riverside County Fish and Game Commission, will direct the one-week Conservation Workshops.

Further information may be had from the Conservation Education Section, Department of Natural Resources, Sacramento, California.

Curriculum Up North

According to an interesting report from Helen Leonard, Conservation Chairman of the Mt. St. Helens Club, in the February *Western Outdoor Quarterly*, Cowlitz County, Washington, has mapped out a curriculum in conservation for the public schools.

During the winter quarter of 1950, some sixty public school teachers of this county met with Dr. Draper from the Education Department of the University of Wash-

ton. The group of teachers, from kindergarten through high school, divided into primary, intermediate, junior high and high school groups, and these divided into smaller ones centered around different phases of conservation. Five hours credit was given by the University of Washington.

The class met once a week for twelve weeks for a four-hour session, the first hour and a half being devoted to a lecture or movies demonstrating some active types of conservation. Participating agencies included federal and state agencies, lumber companies, and the Izaak Walton League.

The following summer and fall, the intermediate, junior high school and high school units were edited and prepared for publishing in mimeographed form by the office of the superintendent of schools of Cowlitz County. The primary unit is now in the process of being published.

Sign Conservation

Trigger happy hunters who like to use highway department road signs to zero in their guns can have a substitute target free.

Wyoming's State Highway Department, weary with the wanton destruction of its costly metal signs, has devised a substitute target. It looks just like the real metal highway marker and has three bulls eyes on it to satisfy the hunters who can't resist firing away at the more costly signs. Below, it reads, "Shoot at this, *not* at our signs!"

These targets, which have been printed for free distribution, are shaped like a highway sign and are the same size. Three bulls eyes appear where the usual highway route number is found.

The Highway Department suggests the target signs be set up at 75 feet for proper zeroing in of most big game rifles.

Some hunters, the department said, annually use the highway signs as targets, and others get so hopping mad when they miss a running target they just blaze away at the state's signs to ease off steam.

The department warned the hunters that if they get caught using the metal highway markers for targets it will cost them not more than \$100 or more than 30 days in the pokey or both.

—*Wyoming Wild Life*

More Letters

(Continued from page 4)

ing and Safety Committees of the American Alpine Club and the British Mountaineering Associations, the accident problem both in Europe and America is being examined and an attempt made to evaluate some of the comparisons.

One of the best safety measures is good training and schools of mountaineering have been established in Britain for the purpose of helping people who want to climb; the courses teach basic mountaineering, beginning with the complete novice. The schools are situated in Scotland, the English Lake District and Wales and at Centres in Switzerland; at Kandersteg there is a British Ski-mountaineering school. All these facilities are non-profit making and they are open to all visiting Americans who wish to climb British and European mountains and at the same time learn how to climb safely. Details may be obtained from the Secretary of the Mountaineering Association, 1 Kildare Gardens, London, W. 2, England.

RUSSELL

[Bertrand Russell, O.M., F.R.S.,
President of the Mountaineering
Association (of Britain)]

CHORLEY

[Lord Chorley, President of The
Holiday Fellowship (of Britain)]
MAYNARD M. MILLER
[Chairman of the Safety Committee,
American Alpine Club]

San Francisco, December 3
EDITOR—Relative to binding my file of the *Sierra Club Bulletin* to match the offset volumes 1 to 5 . . .

May I ask if you or the Club have made any arrangements whereby members who now have complete files of the Bulletins may have them bound and, if so, can you now supply any details? Or are each of us strictly "on our own" and should we make our own arrangements?

H. C. CARRASCO

• We don't usually wait this long before replying (but sometimes we wait longer). We would like to help if we can, but that would probably require getting enough demand for the binding of individual members' files of the *Bulletin* to justify a local binder's matching the cloth on the offset volumes and otherwise preparing himself. If a few members will express interest we'll see what we can do.

The 200 or so owners of the reprint edition of volumes 1 to 5 should not, however, expect a library-rebinding job to match an edition-bound job. The reprint of volumes 1 to 5 was bound from flat sheets, thereby permitting the saddle-sewing that produces a binding which opens flat and easily. Unless one is ready to accept a very high binding cost, the individual already-bound numbers must be gathered and oversewn as whole numbers, which prevents their opening easily and flat. The ideal method, of course, is to have the individual numbers torn apart by signature and sewn together into a homogeneous volume. But this is strictly custom work.

Anyone interested, either way?—Ed.

San Francisco, March 12

The Sierra Club—Supporting the Sierra Club in a modest way has been one of the things I have been just going to do tomorrow. . . .

I make it a special point to pass the Shell Oil windows frequently in order to observe and study the paintings placed on exhibit from time to time. This morning it was an inspiration to see the Sierra Club display and to note the prominence given the book on conservation. It was the nudge I needed to make a start on my intention to help out.

Because there are so many urgently needful activities which richly deserve public support and participation I have to spread what I can devote discouragingly thin. Be assured, however, that more than the enclosed \$5.00 will follow.

ALLEN STAHHAMN

Wilderness Hearing Due: C. Otto Lindh, Regional Forester, Southwestern Region, U.S. Forest Service, has announced a public hearing to be held on August 7, 1952, at Silver City, New Mexico. The hearing is called to provide for a public discussion of announced plans to adjust the boundaries of the Gila Wilderness Area and to establish it by the Secretary of Agriculture. Any person wishing to make a statement for the hearing record will be welcome to do so.

The selected date of August 7, 1952, has been purposely put far enough in advance to allow interested persons to make an on-the-ground inspection. Requests by the public indicate that a number of people and organizations desire to visit the area and determine what this proposed adjustment involves. The late spring and early summer period will provide good weather conditions for visiting the area.

GENERAL LIBRARY.

UNIVERSITY OF MICHIGAN.

ANN ARBOR, MICH.

Reprints from *Sierra Club Bulletin*

The following reprints from the *Sierra Club Bulletin* are available at the Sierra Club office, 1050 Mills Tower, San Francisco, at the prices listed.

A Climber's Guide to the High Sierra.

Part V: The Whitney Region. By John D. and Ruth Mendenhall, Arthur B. Johnson, Braeme Gigas, and Howard Koster. 1941. 20 pages. 25 cents.

Part VI: The Evolution Region and the Black Divide. By Alan M. Hedden and David R. Brower. 1942. 24 pages. 25 cents.

Parts VII and VIII: The Kings-Kern Divide and the Adjacent Crest, by Hervey H. Voge; The Clark Range and Adjacent Peaks, by Richard M. Leonard. 1951. 24 pages. 25 cents. Belaying the Leader. By Richard M. Leonard and Arnold Wexler. 1946. 36 pages. 50 cents; 35 cents for 10 or more.

Mount Waddington. Kodachrome print. By Oscar A. Cook. 1948. 1 page. 10 cents.

Pursuit in the Alps, by David R. Brower; Postwar Mountain Training, by Lt. Col. Robert C. Works. 1946. 30 pages. 25 cents.

A Survey of the Sierra Nevada Bighorn. By Fred L. Jones. 1950. 48 pages. 50 cents; 35 cents for 10 or more.

The Three Lakes (Marian, Lall, Jan) and How They Were Named. By Clarence King (Reprinted from 1870) with introduction by Francis P. Farquhar. 1939. 24 pages. 50 cents.

Yosemite: The Story of An Idea. By Hans Ruth. 1948. 32 pages. 25 cents.

The following indexes and reprints are available without charge except for 5 cents per copy to cover cost of mailing:

Index to Annual Magazine Numbers, *Sierra Club Bulletin*.

Volume 7, 1909-1910.

Volumes 25 to 28, 1940-1943.

Volumes 29 to 31, 1944-1946.

Volumes 32 to 34, 1947-1949.

Index to Monthly Issues, *Sierra Club Bulletin*.

Volumes 32 to 34, 1947-1949. Two sections, one by subject, one chronological.

Animal Life of Yellowstone Park. By Vernon Bailey. 1927. 16 pages.

A Bibliography of John Muir. By Jennie Elliot Doran, and A Reference List to John Muir's Newspaper Articles by Cornelius Beach Bradley. 1916. 25 pages.

Camping on the Equator. By Ynes Mexia. 1937. 8 pages.

The Colorado Is Still Wild. By Weldon F. Heald. 1942. 15 pages.

David Starr Jordan. By Payson J. Treat. 1932. 8 pages.

Early Botanical Ascents of Mount Shasta. By Willis Linn Jepson. 1942. 8 pages.

Equipment and Technique for Camping on Snow. By Bestor Robinson. 1937. 10 pages. Also Part II, The Sectional Tent. By Bestor Robinson. 1941. 10 pages.

The Kings River Region Should Be a National Park. 1939. 16 pages. Many photographs.

The Mountains of Tonquin Valley (with a Note on Mount Robson). By Howard Palmer. 1928. 14 pages.

The Problem of the Wilderness. By Robert Marshall. 1947. 9 pages.

Report on the King's River Cañon and Vicinity. (To the President of the United States, to the Secretary of Agriculture, and to the Forester.) 1907. 31 pages.

Sanctuary for the Alaska Bear. By Stewart Edward White. 1932. 12 pages.

Sierra Synthesis. By Perry A. Thompson. 1947. 4 pages.

Trouble on Olympus [Olympic National Park relinquishment plan.] 1947. 16 pages.

Up Under the Equator. By John Thomas Howell. 1942. 4 pages.

Walker's Discovery of Yosemite. By Francis P. Farquhar. 1942. 15 pages.

William Frederic Badé. By William E. Colby. 1937. 11 pages.

A New Ski Sun Rises. (Reprinted from *Appalachia*.) By Lewis F. Clark. 1933. 13 pages.

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